

#### ABSTRACT OF THE DISCLOSURE

The method comprises the step of forming a diffusion preventing film 16 and an insulation film 18 on an insulation film 12 formed on a substrate 10 and having a Cu interconnection layer 14 buried in; the step of forming a contact hole 20 in the insulation film 18 down to the Cu interconnection layer 14; the step of cleaning the substrate 10 with the contact hole 20 formed with a chemical liquid; the step of drying the substrate 10 cleaned with the chemical liquid; and the step of annealing the dried substrate in a reducing atmosphere.